

Department of the Army New York District Corps of Engineers Jacob K. Javits Federal Building 26 Federal Plaza New York, NY 10278-0090

Week of March 05 - March 11, 2012

The following pages display the results from the USACE-NYD real-time website for the week of Monday, March 05, through Sunday, March 11, 2012.

There were eight blasts this week in the S-AK-2 project area. Our monitoring stations are 2,303 to 2,841 feet away from the blasting areas. We recorded waveforms triggered by the blasts. The maximum vibration was 0.07 in/s recorded at K-Sea Transportation, at a distance of 2,509 feet from the blast. Table 1 summarizes the blasts this week.

On Thursday, March 1, 2012 Station-004 (Located at Great Lakes Dredging and Docks) was removed after recording blast AK2-0010. This station will be relocated to a new position West of Station-006.

Page 2 summarizes dredge locations for this week. The map shows the week's last dredge locations by colored symbols, connected by colored lines to the week's previous locations marked by gray symbols. Dredge Deleware bay and Drill boat Kraken operated in Arthur Kill all week. Dredge JP Boisseau operated in Arthur Kill on Sunday

The remaining odd pages display the home page showing the maximum vibration measured in all of the stations for most recent event for each day:

March 05

March 06

March 07

March 08

March 09

March 10

March 11

The even pages show the maximum vibration observed at each station along easting for each event

The results for this week show the ambient results measured at the two active stations at: Shooters Island, and K-Sea Transportation. The station locations are on each page.

Ground vibrations at Shooters Island were all below 0.0506 in/s.

Ground vibrations at K-Sea Transportation were all below 0.07 in/s. The station receives vibrations from Richmond Terrace traffic during the daylight hours. All blast vibration measurements are significantly below the contract vibration limits for this site.

Table 1. S-AK-1 Blast Summary for this week

Blast	Date & Time	Distance from blast	e4s Max. vibration
	EST/EDT of blast	to e4s stations (feet)	(in/s)
AK2-014	2012-03-05 08:59	2,330 - 2,380	0.0506
AK2-015	2012-03-06 12:09	2,490 - 2,520	0.0531
AK2-016	2012-03-07 09:51	2,510 - 2,540	0.07
AK2-017	2012-03-07 16:39	2,510 - 2,600	0.0369
AK2-018	2012-03-08 12:24	2,500 - 2,610	0.065
AK2-019	2012-03-08 14:21	2,510 - 2,670	0.0231
AK2-020	2012-03-09 10:47	2,370 - 2,420	0.0469
AK2-021	2012-03-10 14:45	2,300 - 2,840	0.0306



Event Summary Stations: History Home **Dredges** Links

Dredge Position Summary

This page summarizes dredge positions for the week. The Arthur Kill contract area is mapped with a top-of-rock map. The navigation grid is superimposed. The map shows dredge locations by colored symbols, connected by colored lines to the week's past locations marked by gray symbols. The map resets beginning the Monday of each week.

Mousing over a dredge location produces a pop-up text box giving dredge name, date of location, and easting and northing coordinates of the location in the NAD83 New Jersey State Plane coordinate system.

Click on a station for station information.



Todays Dredge Position

Latest Week's **Dredge Position Summary**

Project **History List**

The table below lists the date, name, easting, northing, and notes for the week's dredge positions. The position is the last reported dredge position of the day.

Dredge Location Table

Date	Dredge Name		Easting	Northing	Notes
2012-03-11 Sun	Dredge Delaware Bay	D	584797	660388	
2012-03-11 Sun	Dredge JP Boisseau	D	585503	660737	
2012-03-11 Sun	Drillboat Kraken	•	586096	661078	
2012-03-10 Sat	Dredge Delaware Bay	D	584516	660711	
2012-03-10 Sat	Dredge JP Boisseau	D	585395	660758	
2012-03-10 Sat	Drillboat Kraken	•	585760	661029	
2012-03-09 Fri	Capt AJ Fournier	D	585423	660751	
2012-03-09 Fri	Dredge Delaware Bay	D	584324	660725	
2012-03-09 Fri	Drillboat Kraken	•	584919	660706	
2012-03-08 Thu	Capt AJ Fournier	D	585300	660812	
2012-03-08 Thu	Dredge Delaware Bay	D	584483	660518	
2012-03-08 Thu	Drillboat Kraken	•	584686	660843	
2012-03-07 Wed	Dredge Delaware Bay	D	584325	660419	
2012-03-07 Wed	Dredge JP Boisseau	D	585225	660983	
2012-03-07 Wed	Drillboat Kraken	•	584805	660847	
2012-03-06 Tue	Dredge Delaware Bay	D	584217	660433	
2012-03-06 Tue	Dredge JP Boisseau	D	585345	660820	
2012-03-06 Tue	Drillboat Kraken	•	585009	660859	
2012-03-05 Mon	Dredge Delaware Bay	D	583984	660425	
2012-03-05 Mon	Dredge JP Boisseau	D	585506	660835	
2012-03-05 Mon	Drillboat Kraken	•	585069	660710	



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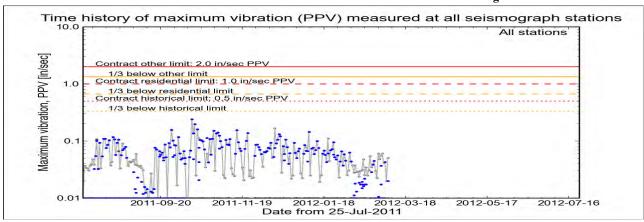
Click station for station information or click channel for event summary.



Latest Event Summary

The graph below is a plot of the maximum vibration recorded by any and all of the numerous seismograph stations during the current observation event (ambient or blast). The horizontal axis gives the date from the start of the project on 25 July 2011. The vertical axis gives the maximum vibration in peak particle velocity (PPV) in units of inches per second (in/sec). The red curves show the project's contract limits; the orange curves show one-third (1/3) below these contract limits. (The light gray curve is ambient-vibration level. The blue dots are blast-vibration levels.)





(Click on graph or here for larger view)

Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Mon 05-Mar-2012	13:47:47	0.0506	Shooters Island
Ambient	Sun 04-Mar-2012	16:17:35	0.0200	K-Sea Transportation
Blast	Sat 03-Mar-2012	20:02:34	0.0431	K-Sea Transportation
Ambient	Fri 02-Mar-2012	15:26:13	0.0412	K-Sea Transportation
Ambient	Thu 01-Mar-2012	13:54:13	0.0606	K-Sea Transportation
Ambient	Wed 29-Feh-2012	14:27:15	0.0562	K-Sea Transportation
e	4sciences Earthworks,	LLC 27 Glen Road, Sa	ndy Hook, CT 064	82 www.e4sciences.com



Stations: Home **Event Summary Dredges** History Links

Arthur Kill Blasting Event Summary

This page summarizes measurements of ground vibrations for the selected event. This page displays the maximum vibration recorded at each and every seismograph station during this event.

The Arthur Kill contract area is mapped below with a top-of-rock map. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge location is marked in red. The easting and northing map coordinates in the New Jersey State Plane coordinate system are in yellow. The locations of active seismograph stations are marked by yellow station symbols. (e4sciences stations are circles. CDB stations are triangles.) Selecting a station activates its station page.

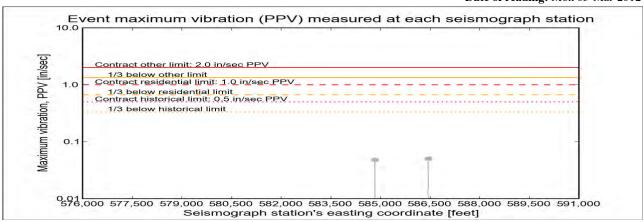
Click station for more information about the station.



Selected Event Summary

The graph below plots the maximum vibration during the selected event period (blast or ambient) recorded at each and every seismograph station along the easting positions. The vertical axis gives the maximum vibration in peak particle velocity (PPV) in units of inches per second (in/sec). If the maximum vibration level at a station is below 0.01 in/sec, the marker is a v-shaped triangle at 0.01 in/sec. (Light-gray stems indicate ambientvibration level. Black stems indicate blast-vibration level. Dark-gray stems indicate predicted blast-vibration level.)

Date of reading: Mon 05-Mar-2012



(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
K-Sea Transportation - e4s006	Mon 05-Mar-2012	13:44:38	0.0481	Ambient
Shooters Island - e4s00	5 Mon 05-Mar-2012	13:47:47	0.0506	Ambient



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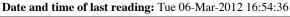
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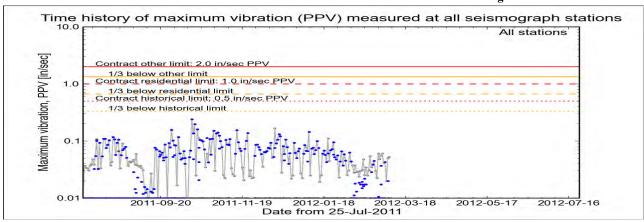
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Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Tue 06-Mar-2012	16:54:36	0.0531	K-Sea Transportation
Ambient	Mon 05-Mar-2012	13:47:47	0.0506	Shooters Island
Ambient	Sun 04-Mar-2012	16:17:35	0.0200	K-Sea Transportation
Blast	Sat 03-Mar-2012	20:02:34	0.0431	K-Sea Transportation
Ambient	Fri 02-Mar-2012	15:26:13	0.0412	K-Sea Transportation
Ambient	Thu 01-Mar-2012	13:54:13	0.0606	K-Sea Transportation
e	4sciences Earthworks,	LLC 27 Glen Road, Sa	indy Hook, CT 064	82 www.e4sciences.com



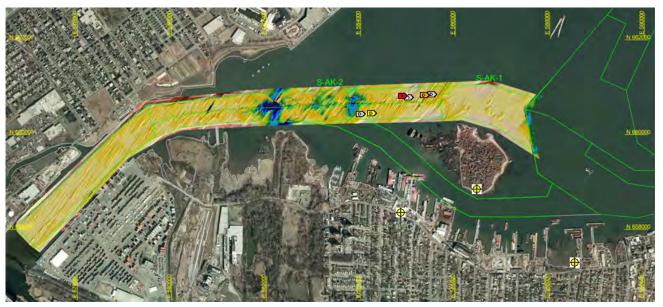
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Arthur Kill Blasting Event Summary

This page summarizes measurements of ground vibrations for the selected event. This page displays the maximum vibration recorded at each and every seismograph station during this event.

The Arthur Kill contract area is mapped below with a top-of-rock map. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge location is marked in red. The easting and northing map coordinates in the New Jersey State Plane coordinate system are in yellow. The locations of active seismograph stations are marked by yellow station symbols. (e4sciences stations are circles. CDB stations are triangles.) Selecting a station activates its station page.

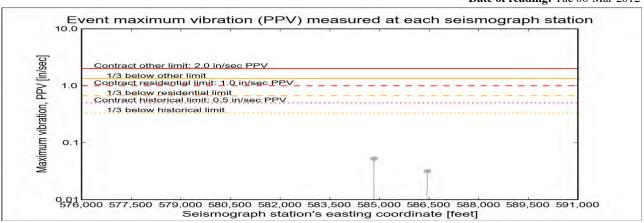
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Date of reading: Tue 06-Mar-2012



(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
K-Sea Transportation - e4s006	Tue 06-Mar-2012	16:54:36	0.0531	Ambient
Shooters Island - e4s00:	5 Tue 06-Mar-2012	17:02:47	0.0319	Ambient



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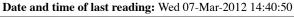
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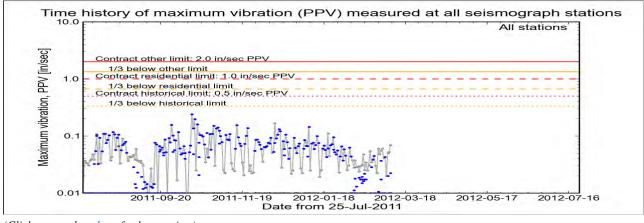
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Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Wed 07-Mar-2012	14:40:50	0.0700	K-Sea Transportation
Ambient	Tue 06-Mar-2012	16:54:36	0.0531	K-Sea Transportation
Ambient	Mon 05-Mar-2012	13:47:47	0.0506	Shooters Island
Ambient	Sun 04-Mar-2012	16:17:35	0.0200	K-Sea Transportation
Blast	Sat 03-Mar-2012	20:02:34	0.0431	K-Sea Transportation
Ambient	Fri 02-Mar-2012	15:26:13	0.0412	K-Sea Transportation
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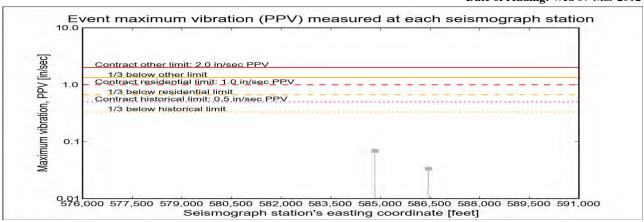
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Date of reading: Wed 07-Mar-2012



(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
K-Sea Transportation - e4s006	Wed 07-Mar-2012	14:40:50	0.07	Ambient
Shooters Island - e4s00	5 Wed 07-Mar-2012	14:47:48	0.0337	Ambient



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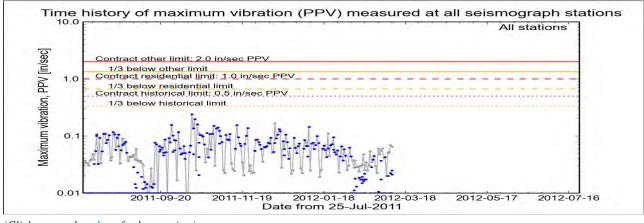
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Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Thu 08-Mar-2012	17:21:40	0.0650	K-Sea Transportation
Ambient	Wed 07-Mar-2012	14:40:50	0.0700	K-Sea Transportation
Ambient	Tue 06-Mar-2012	16:54:36	0.0531	K-Sea Transportation
Ambient	Mon 05-Mar-2012	13:47:47	0.0506	Shooters Island
Ambient	Sun 04-Mar-2012	16:17:35	0.0200	K-Sea Transportation
Rlast	Sat 03-Mar-2012	20:02:34	0.0431	K-Sea Transportation
	e4sciences Earthwork	S, LLC 27 Glen Ro	ad, Sandy Hook, CT 064	82 www.e4sciences.com



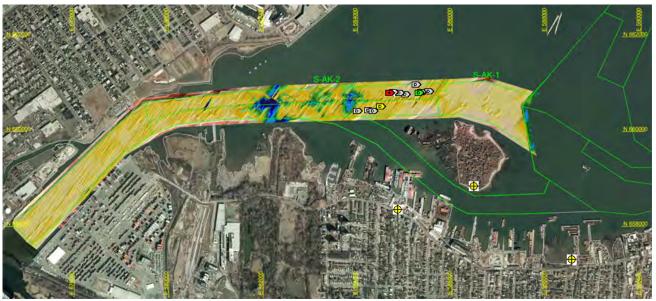
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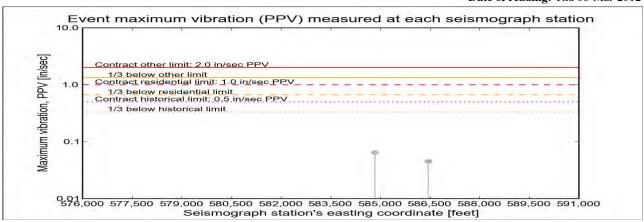
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Date of reading: Thu 08-Mar-2012



(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
K-Sea Transportation - e4s006	Thu 08-Mar-2012	17:21:40	0.065	Ambient
Shooters Island - e4s00:	5 Thu 08-Mar-2012	17:17:46	0.0456	Ambient



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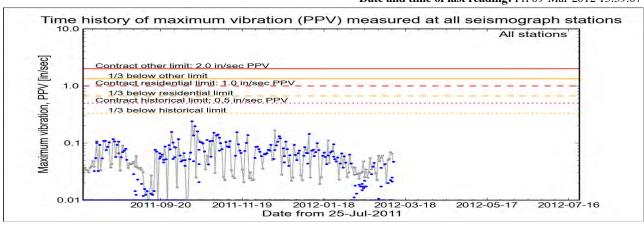
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Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Blast	Fri 09-Mar-2012	15:39:07	0.0469	K-Sea Transportation
Ambient	Thu 08-Mar-2012	17:21:40	0.0650	K-Sea Transportation
Ambient	Wed 07-Mar-2012	14:40:50	0.0700	K-Sea Transportation
Ambient	Tue 06-Mar-2012	16:54:36	0.0531	K-Sea Transportation
Ambient	Mon 05-Mar-2012	13:47:47	0.0506	Shooters Island
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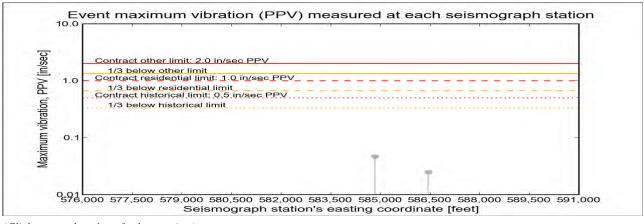
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Date of reading: Fri 09-Mar-2012



(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
K-Sea Transportation - e4s006	Fri 09-Mar-2012	15:39:07	0.0469	Ambient
Shooters Island - e4s00:	5 Fri 09-Mar-2012	15:32:48	0.025	Ambient



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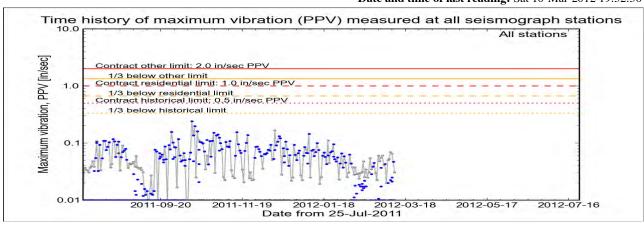
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Ambient	Sat 10-Mar-2012	19:32:36	0.0306	K-Sea Transportation
Blast	Fri 09-Mar-2012	15:39:07	0.0469	K-Sea Transportation
Ambient	Thu 08-Mar-2012	17:21:40	0.0650	K-Sea Transportation
Ambient	Wed 07-Mar-2012	14:40:50	0.0700	K-Sea Transportation
Ambient	Tue 06-Mar-2012	16:54:36	0.0531	K-Sea Transportation
Amhient	Mon 05-Mar-2012	13:47:47	0.0506	Shooters Island
	e4sciences Earthwork	S, LLC 27 Glen Ro	ad, Sandy Hook, CT 064	82 www.e4sciences.co

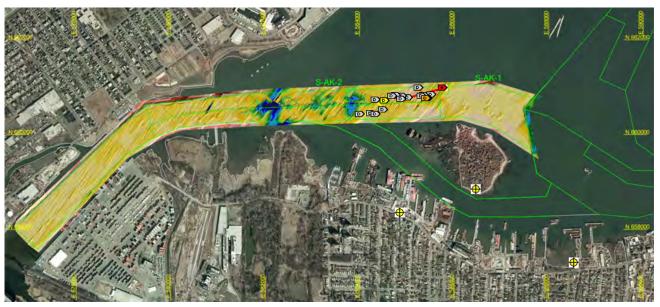


Arthur Kill Blasting Event Summary

This page summarizes measurements of ground vibrations for the selected event. This page displays the maximum vibration recorded at each and every seismograph station during this event.

The Arthur Kill contract area is mapped below with a top-of-rock map. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge location is marked in red. The easting and northing map coordinates in the New Jersey State Plane coordinate system are in yellow. The locations of active seismograph stations are marked by yellow station symbols. (e4sciences stations are circles. CDB stations are triangles.) Selecting a station activates its station page.

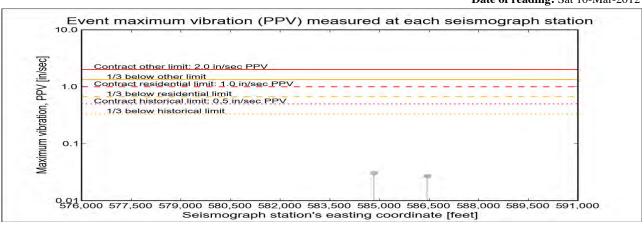
Click station for more information about the station.



Selected Event Summary

The graph below plots the maximum vibration during the selected event period (blast or ambient) recorded at each and every seismograph station along the easting positions. The vertical axis gives the maximum vibration in peak particle velocity (PPV) in units of inches per second (in/sec). If the maximum vibration level at a station is below 0.01 in/sec, the marker is a v-shaped triangle at 0.01 in/sec. (Light-gray stems indicate ambientvibration level. Black stems indicate blast-vibration level. Dark-gray stems indicate predicted blast-vibration level.)

Date of reading: Sat 10-Mar-2012



(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
K-Sea Transportation - e4s006	Sat 10-Mar-2012	19:32:36	0.0306	Ambient
Shooters Island - e4s00	5 Sat 10-Mar-2012	19:34:29	0.0269	Ambient



Arthur Kill Blast Vibration Summary

This site summarizes the measured ground vibrations in northwest Staten Island, from rock blasting in the Arthur Kill and other possible sources. The site is updated daily. The data are intended for the sole use of the US Army Corps of Engineers - New York District, for managing and monitoring the performance of NYNJ Harbor Deepening Project Contract in Arthur Kill starting 25 July 2011.

This page represents the most recent observations.

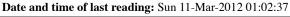
The Arthur Kill contract area is mapped below in light gray. The navigation grid is superimposed. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge is marked in red. The easting and northing map coordinates in the New Jersey State Plane coordinate system are in yellow. The locations of active seismograph stations are marked by yellow station symbols. (e4sciences stations are circles. CDB stations are triangles.) Selecting a station activates its station page.

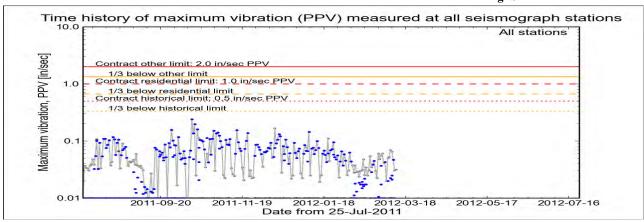
Click station for station information or click channel for event summary.



Latest Event Summary

The graph below is a plot of the maximum vibration recorded by any and all of the numerous seismograph stations during the current observation event (ambient or blast). The horizontal axis gives the date from the start of the project on 25 July 2011. The vertical axis gives the maximum vibration in peak particle velocity (PPV) in units of inches per second (in/sec). The red curves show the project's contract limits; the orange curves show one-third (1/3) below these contract limits. (The light gray curve is ambient-vibration level. The blue dots are blast-vibration levels.)





(Click on graph or here for larger view)

Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Sun 11-Mar-2012	01:02:37	0.0319	K-Sea Transportation
Ambient	Sat 10-Mar-2012	19:32:36	0.0306	K-Sea Transportation
Blast	Fri 09-Mar-2012	15:39:07	0.0469	K-Sea Transportation
Ambient	Thu 08-Mar-2012	17:21:40	0.0650	K-Sea Transportation
Ambient	Wed 07-Mar-2012	14:40:50	0.0700	K-Sea Transportation
Ambient	Tue 06-Mar-2012	16:54:36	0.0531	K-Sea Transportation
	e4sciences Earthwork	5, LLC 27 Glen Ro	ad, Sandy Hook, CT 064	82 www.e4sciences.co



Arthur Kill Blasting Event Summary

This page summarizes measurements of ground vibrations for the selected event. This page displays the maximum vibration recorded at each and every seismograph station during this event.

The Arthur Kill contract area is mapped below with a top-of-rock map. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge location is marked in red. The easting and northing map coordinates in the New Jersey State Plane coordinate system are in yellow. The locations of active seismograph stations are marked by yellow station symbols. (e4sciences stations are circles. CDB stations are triangles.) Selecting a station activates its station page.

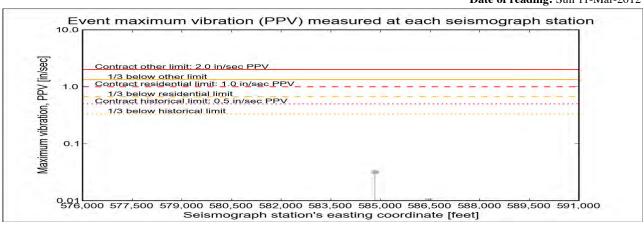
Click station for more information about the station.



Selected Event Summary

The graph below plots the maximum vibration during the selected event period (blast or ambient) recorded at each and every seismograph station along the easting positions. The vertical axis gives the maximum vibration in peak particle velocity (PPV) in units of inches per second (in/sec). If the maximum vibration level at a station is below 0.01 in/sec, the marker is a v-shaped triangle at 0.01 in/sec. (Light-gray stems indicate ambientvibration level. Black stems indicate blast-vibration level. Dark-gray stems indicate predicted blast-vibration level.)

Date of reading: Sun 11-Mar-2012



(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
K-Sea Transportation - e4s006	Sun 11-Mar-2012	01:02:37	0.0319	Ambient
Shooters Island - e4s00	5 Sun 11-Mar-2012	02:17:48	0.005	Ambient